

WHAT IS CLAIMED IS:

1 *SV* 1. A method of arranging objects comprising:
2 *AV* setting a class hierarchy, wherein
3 the class hierarchy comprises an upper level class and a lower level class, and
4 the objects are members of at least one of the upper level class and the lower
5 level class;
6 assigning an attribute to the top level class, wherein the attribute describes the objects;
7 and
8 inheriting of the attribute by the lower level class.

1 2. The method of arranging objects of claim 1, further comprising:
2 assigning an attribute to the lower level class, the attribute describing an object that is
3 a member of the lower level class.

1 3. The method of arranging objects of claim 1, wherein the attribute comprises a
2 distinctive domain value set.

1 4. The method of arranging objects of claim 1, wherein the class hierarchy
2 further comprises a class below the lower level class in the class hierarchy, and further
3 comprising:
4 inheriting of the attribute by the class.

1 5. The method of arranging objects of claim 1, further comprising:
2 expanding the class hierarchy horizontally by adding a class to the lower level class;
3 and
4 inheriting of the attribute by the class.

1 6. A hierarchical class architecture of objects comprising:
2 an upper level class;
3 a lower level class; and
4 an attribute, wherein
5 the attribute is assigned to the upper level class.

6 the objects are members of at least one of the upper level class and the lower
7 level class,
8 the attribute describes the objects, and
9 the lower level class is configured to inherit the attribute.

1 7. The hierarchical class architecture of claim 6, further comprising:
2 an additional attribute, wherein
3 the additional attribute is assigned to the lower level class, and
4 the attribute describes an object in the lower level class.

1 8. The hierarchical class architecture of claim 6, wherein the attribute comprises
2 a distinctive domain value set.

1 9. The hierarchical class architecture of claim 6, further comprising:
2 a class, wherein
3 the class is below the lower level class in the hierarchical class architecture,
4 and
5 the class is configured to inherit the attribute.

1 10. The hierarchical class architecture of claim 6, wherein
2 the lower level class is configured to be expanded horizontally by virtue of being
3 configured to provide for addition of a class, and
4 the class is configured to inherit the attribute.

1 11. A computer system comprising:
2 a processor;
3 a computer readable medium coupled to the processor; and
4 computer code, encoded in the computer readable medium, configured to cause the
5 processor to:
6 set a class hierarchy, wherein
7 the class hierarchy comprises an upper level class and a lower level class, and
8 the objects are members of at least one of the upper level class and the lower
9 level class;

10 assign an attribute to the top level class, wherein the attribute describes the objects;
11 and
12 provide inheritance of the attribute by the lower level class.

1 12. The computer system of claim 11, wherein the computer code is further
2 configured to cause the processor to:
3 assign an attribute to the lower level class, the attribute describing an object that is a
4 member of the lower level class.

1 13. The computer system of claim 11, wherein the attribute comprises a distinctive
2 domain value set.

1 14. The computer system of claim 11, wherein the class hierarchy further
2 comprises a class below the lower level class in the class hierarchy, and the computer code is
3 further configured to cause the processor to:
4 provide inheritance of the attribute by the class.

1 15. The computer system of claim 11, wherein the computer code is further
2 configured to cause the processor to:
3 expand the class hierarchy horizontally by adding a class to the lower level class; and
4 provide inheritance of the attribute by the class.

1 16. An apparatus for arranging objects comprising:
2 means for setting a class hierarchy, wherein
3 the class hierarchy comprises an upper level class and a lower level class, and
4 the objects are members of at least one of the upper level class and the lower
5 level class;
6 means for assigning an attribute to the top level class, wherein the attribute describes
7 the objects; and
8 means for inheriting of the attribute by the lower level class.

1 17. The apparatus of claim 16, further comprising:
2 means for assigning an attribute to the lower level class, the attribute describing an
3 object that is a member of the lower level class.

1 18. The apparatus of claim 16, wherein the attribute comprises a distinctive
2 domain value set.

1 19. The apparatus of claim 16, wherein the class hierarchy further comprises a
2 class below the lower level class in the class hierarchy, and further comprising:
3 means for inheriting of the attribute by the class.

1 20. The apparatus of claim 16, further comprising:
2 means for expanding the class hierarchy horizontally by adding a class to the lower
3 level class; and
4 means for inheriting of the attribute by the class.

1 21. A computer program product, encoded in computer readable media,
2 comprising:
3 a first set of instructions, executable on a computer system, configured to set a class
4 hierarchy, wherein
5 the class hierarchy comprises an upper level class and a lower level class, and
6 the objects are members of at least one of the upper level class and the lower
7 level class;
8 a second set of instructions, executable on the computer system, configured to assign
9 an attribute to the top level class, wherein the attribute describes the objects;
10 and
11 a third set of instructions, executable on the computer system, configured to provide
12 inheritance of the attribute by the lower level class.

1 22. The computer program product of claim 21, further comprising:
2 a fourth set of instructions, executable on the computer system, configured to assign
3 an attribute to the lower level class, the attribute describing an object that is a
4 member of the lower level class.

1 23. The computer program product of claim 21, wherein the attribute comprises a
2 distinctive domain value set.

1 24. The computer program product of claim 21, wherein the class hierarchy
2 further comprises a class below the lower level class in the class hierarchy, and further
3 comprising:

4 a fourth set of instructions, executable on the computer system, configured to provide
5 inheritance of the attribute by the class.

1 25. The computer program product of claim 21, further comprising:
2 a fourth set of instructions, executable on the computer system, configured to expand
3 the class hierarchy horizontally by adding a class to the lower level class; and
4 a fifth set of instructions, executable on the computer system, configured to provide
5 inheritance of the attribute by the class.

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